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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR      | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|---------------------------|---------------------|------------------|
| 09/660,095      | 09/12/2000  | Achilles George Kogiantis | 3-3-12              | 7320             |

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EXAMINER

AFSHAR, KAMRAN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2682     | 5            |

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/660,095             | KOGIANTIS ET AL.    |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Kamran Afshar          | 2681                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: _____                                     |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim1 is objected to because of the following informalities: “at least one condition”, “at least one channel condition”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, it is unclear how the channel condition is the mobility of the mobile station, i.e. given mobile station is just that, mobile, it is seen how mobility can effect channel quality but it is not seen the “channel condition” is mobility of the mobile station.

Regarding claim 3, it is unclear how the channel condition is the capability of the mobile station, i.e. given mobile station is just that, mobile, it is seen how mobility can effect channel quality but it is not seen the “channel condition” is capability of the mobile station.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 6-8, 10-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Motorola (EP 0 966 125 A1).

Regarding claim 1, Motorola discloses a method for reconfiguring a communication system, comprising the steps of determining at least one condition associated with a mobile station (Co. 3, Lines 40-57); and selecting one of a plurality of transmit configurations using the at least one channel condition (See Co. 2, Lines 5-14, Co. 3, Lines 40-57).

Regarding claim 6, Motorola discloses the at least one channel condition is an error rate (See Co. 6, Lines 3-9 & Co. 6, Line 44 – Co. 7, Line 12).

Regarding claim 7, Motorola discloses selecting a single antenna (See Co. 5, Line 57- Co. 6 Line 2) transmit configuration (See Co. 2, Lines 5-14, Co. 5, Line 50-Co. 6, Line 27).

Regarding claim 8, Motorola discloses the step of selecting comprises selecting a selection transmit diversity transmit configuration (See Co. 2, Lines 5-14, Co. 5, Line 50-Co. 6, Line 27).

Regarding claim 10, Motorola discloses selecting a multi-output and multi-input transmit configuration (See Co. 3, Lines 19-24 & Co. 3 Line 41 – Co. 4, Line 16).

Regarding claim 11, Motorola discloses the step of selecting comprises selecting a configuration that selects one of a plurality of transmit antennas (See Co. 2, Lines 5-14, Co. 5, Line 50-Co. 6, Line 27).

Regarding claim 12, Motorola discloses the step of selecting comprises selecting a configuration that transmits using a plurality of transmit antennas (See Co. 2, Lines 5-14, Co. 3, Line 40-57, Co. 5, Line 50-Co. 6, Line 27, 222, 208 of Fig. 2).

Regarding claim 13, Motorola discloses the step of selecting comprises selecting a configuration that transmits using a plurality of transmit antennas (See Co. 2, Lines 5-14, Co. 3, Line 40-57, Co. 5, Line 50-Co. 6, Line 27, 222 of Fig. 2), where each antenna uses a different orthogonal code (See Co. 5, Line 50 – Co. 6, Line 2, Co. 6, Lines 25-27 and W1,2, W2,2, WN2 & 208 of Fig.2).

Regarding claim 14, Motorola discloses the step of selecting comprises selecting a configuration that transmits using a plurality of transmit antennas (See Co. 2, Lines 5-14, Co. 5, Line 50-Co. 6, Line 27, 222 of Fig. 2), where each antenna uses a different Walsh code Co. 5, Line 50 – Co. 6, Line 2, Co. 6, Lines 25-27 and W1,2 , W2,2, WN2 & 208 of Fig.2).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola (EP 0 966 125 A1) in view of Wiedeman et al (U. S. Patent 5,859,879).

Regarding claim 4, Motorola discloses everything as applied above in claim 1. However, Motorola failed teaching the at least one channel condition is the signal to noise ratio of the communication channel. Wiedeman teaches the at least one channel condition is the signal to noise ratio of the communication channel (See Co. 2, Lines 6-14, Co. 3, Lines 1-20, 215, 230 of Fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide above teaching of Wiedeman to Motorola to provide mechanism to limit

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future transmissions of signal copies over a particular communication path based on signal quality as suggested by Wiedeman (See Co. 2, Lines 45-47).

Regarding claim 5, Wiedeman discloses the at least one channel condition is the signal to noise ratio of the communication channel (See Co. 12, Lines 17-40).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola (EP 0 966 125 A1) in view of Allpress et al (U. S. Patent 6,392,988 B1).

Regarding claim 9, Motorola discloses everything as applied above in claim 1. However, Motorola failed teaching space time spreading transmit configuration. Allpress teaches space time spreading transmit configuration (See Co. 1 Line 61 – Co. 2, Line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide above teaching of Allpress to Motorola to minimize the number of components in the transmitter as suggested by Allpress (See Co. 1 Line 67 – Co. 2, Line 3).

#### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by DeSantis (U.S. Patent 5,628,052).

Regarding claim 1, DeSantis also discloses a method for reconfiguring a communication system (See Abstract, Fig. 1, Co. 2, Lines 7-27), comprising the steps of determining at least one condition associated with a mobile station (See 222, 224, 226, 228, 230, 232 of Fig 2B); and

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selecting one of a plurality of transmit configurations using the at least one channel condition  
(See 324, 326, 330, 332, 333, 334 of Fig. 3B) also (See Co. 2, Lines 7-27 & Co. 6, Line 41 – Co. 7, Line 15).

***Conclusion***

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (703) 305-7373. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached @ (703) 308-4778. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314 for all communications.

  
Kamran Afshar

  
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3/24/03